

What is claimed is:

1. A timer reservation device for starting a recording onto a record medium automatically at a reserved date and time,
5 comprising:

reservation setting means capable of setting a first reserved program to reserve repetitive executions of a reservation setting for a plurality of days, said reservation setting extending from a recording start time to a recording
10 end time;

remaining capacity detecting means for detecting the recordable remaining capacity of said record medium; and

calculating means for calculating up to what date the recording of said first reserved program is executable on said record medium, based on the recordable remaining capacity and the recording time of one execution of said first reserved program, wherein

a due date calculated by said calculating means is displayed on display means.

20

2. The timer reservation device according to claim 1,
wherein:

said display means is a TV set externally connected to the time reservation device; and

25 the timer reservation device further comprises an on-screen data generating unit for generating a video signal to

display specifics of said first reserved program and the due date calculated by said calculation means on a screen of said TV set.

5 3. The timer reservation device according to claim 1,
wherein said reservation setting means selects at least one from
among daily, day of week, Monday-Saturday, and Monday-Friday
to reserve the repetitive executions of said reservation
setting for a plurality of days.

10 4. The timer reservation device according to claim 1,
wherein:

the timer reservation device compresses a record signal
at a predetermined compression rate and recording the resultant
15 on said record medium; and

said calculating means calculates a recording capacity
necessary for one execution of the reservation setting of said
first reserved program based on the recording time of one
execution of said first reserved program and said compression
20 rate, subtracts the necessary recording capacity from the
recordable capacity repetitively, and sets the due date at the
date of the last reservation setting to be executed with
remaining capacity.

25 5. The timer reservation device according to claim 2,
wherein:

RECEIVED
U.S. PATENT AND TRADEMARK OFFICE
JULY 1973

said reservation setting means is also capable of setting
a second reserved program to reserve an execution of a
reservation setting at a designated date alone, said
reservation setting extending from a recording start time to
5 a recording end time; and

the timer reservation device, if said second reserved
program is to be executed prior to the first-to-be-executed
reservation setting of said first reserved program and requires
a recording capacity smaller than or equal to the recordable
10 capacity of said record medium, displays on said display means
that the recording to be executed for said second reserved
program is recordable on said record medium.

6. The timer reservation device according to claim 5,
15 wherein the timer reservation device, if said second reserved
program is to be executed prior to the first-to-be-executed
reservation setting of said first reserved program and requires
a recording capacity greater than the recordable capacity of
said record medium, displays on said display means that the
20 recording for said second reserved program is unrecordable on
said record medium.

7. The timer reservation device according to claim 5,
wherein the timer reservation device, if said second reserved
25 program is to be executed prior to the first-to-be-executed
reservation setting of said first reserved program and requires

a recording capacity greater than the recordable capacity of said record medium, displays on said display means the recording time said record medium falls short of in making the recording for said second reserved program.

5

8. The timer reservation device according to claim 1,
wherein:

10 said reservation setting means is also capable of setting a second reserved program to reserve an execution of a reservation setting at a designated date alone, said reservation setting extending from a recording start time to a recording end time; and

15 the timer reservation device, if said first reserved program contains a reservation setting to be executed prior to said second reserved program and said record medium falls short of the recordable capacity with respect to the recording time of said first reserved program, displays on said display means that said second reserved program is unrecordable, even in the cases where said second reserved program requires a recording capacity smaller than or equal to the recordable capacity of said record medium.

20 9. A timer reservation device for starting a recording onto a record medium automatically at a reserved date and time,
25 comprising:

 reservation setting means capable of setting a first

D
O
C
U
M
E
N
T
S

10
5 reserved program to reserve repetitive executions of a reservation setting for a plurality of days and a second reserved program to reserve an execution of a reservation setting at a designated date alone, said reservation settings each extending from a recording start time to a recording end time;

15 remaining capacity detecting means for detecting the recordable remaining capacity of said record medium; and

10 calculating means for calculating up to what date the recording of said first reserved program is executable on said record medium, based on the recordable remaining capacity, the recording time of one execution of said first reserved program, and, if said second reserved program is to be executed prior to said first reserved program, the recording time of said 15 second reserved program, wherein

a due date calculated by said calculating means is displayed on display means.

10. The timer reservation device according to claim 9,

20 wherein:

said display means is a TV set externally connected to the time reservation device; and

the timer reservation device further comprises an on-screen data generating unit for generating a video signal to display specifics of said first reserved program and the due 25 date calculated by said calculation means on a screen of said

TV set.

11. A recording and reproducing apparatus for storing a recording onto a record medium automatically at a reserved date
5 and time, comprising:

reservation setting unit capable of setting a first reserved program to reserve repetitive executions of a reservation setting for a plurality of days, said reservation setting extending from a recording start time to a recording end time;

remaining capacity detecting circuit that detects the recordable remaining capacity of said record medium; and

calculating circuit that calculates up to what date the recording of said first reserved program is executable on said record medium, based on the recordable remaining capacity and the recording time of one execution of said first reserved program, wherein

a due date calculated by said calculating circuit is displayed on display means.

20
12. A recording and reproducing apparatus for storing a recording onto a record medium automatically at a reserved date and time, comprising:

reservation setting unit capable of setting a first reserved program to reserve repetitive executions of a reservation setting for a plurality of days and a second

reserved program to reserve an execution of a reservation setting at a designated date alone, said reservation settings each extending from a recording start time to a recording end time;

5 remaining capacity detecting circuit that detects the recordable remaining capacity of said record medium; and

calculating circuit that calculates up to what date the recording of said first reserved program is executable on said record medium, based on the recordable remaining capacity, the
10 recording time of one execution of said first reserved program, and, if said second reserved program is to be executed prior to said first reserved program, the recording time of said second reserved program, wherein

a due date calculated by said calculating circuit is
15 displayed on display means.